

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently amended) A post-metal-plasma-etching wafer cleaning process, comprising:

- 5 providing a wafer having ~~a naked~~ an exposed metal structure thereon;
dipping the wafer into a first cleaning vessel having a volume of basic solution therein; and
after dipping the wafer in the first cleaning vessel, the wafer is then transferred into a second cleaning vessel to perform at least one cycle of a hot quick-dump-rinse
10 (hot QDR) process comprising a step of injecting heated deionized (DI) water into the second cleaning vessel from bottom of the second cleaning vessel; wherein the DI water injected into the second cleaning vessel is heated to a temperature of about 70°C to 80°C; and wherein the hot QDR process is carried out without using a scrubber positioned over the second cleaning vessel for preventing pumping air into the DI
15 water.

Claim 2 (Canceled)

- Claim 3 (Currently amended) The post-metal-plasma-etching wafer cleaning process
20 of claim-2 1 wherein the hot QDR process further comprises a step of bubbling the heated DI water with CO₂ for keeping the heated DI water in a weak-basie acidic state.

Claim 4 (Canceled)

- 25 Claim 5 (Original) The post-metal-plasma-etching wafer cleaning process of claim 1 wherein the volume of basic solution is a volume of amine-based basic solution.

Claim 6 (Canceled)

- 30 Claim 7 (Currently amended) A method for preventing corrosion in the fabrication of integrated circuits, comprising:

providing a wafer having ~~a naked~~ an exposed metal structure thereon; and

executing a wet bench process over the wafer, comprising:

dipping the wafer in a basic solution;

performing a post-strip-rinse process after dipping the wafer in the basic solution;

5 performing at least one cycle of a hot quick-dump-rinse (hot QDR) process carried out in a QDR tank, wherein the hot QDR process comprises a step of injecting heated DI water into the QDR tank from bottom of the QDR tank without using a scrubber positioned over the QDR tank for preventing pumping air into the DI water, wherein the DI water injected into the QDR tank is heated
10 to a temperature of about 70°C to 80°C; and

performing a deionized water (DI) overflow final rinse at room temperature.

Claim 8 (Canceled)

15 Claim 9 (Canceled)

Claim 10 (Canceled)

Claim 11 (Original) The method of claim 7 wherein the basic solution is amine-based
20 basic solution.

Claim 12 (Original) The method of claim 7 wherein post-strip-rinse process utilizes NMP (N-methyl-2-pyrrolidone) containing solution.

25 Claim 13 (Canceled)

Claim 14 (Original) The method of claim 7 wherein the room temperature is approximately between 20°C and 30°C.

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